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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,903	02/05/2004	Kuester Joern	EUR 50877/USw	5357
63068 7590 06/10/2011 HUNTSMAN INTERNATIONAL LLC LEGAL DEPARTMENT 10003 WOODLOCH FOREST DRIVE THE WOODLANDS, TX 77380				
EXAMINER COONEY, JOHN M				
ART UNIT 1765		PAPER NUMBER		
NOTIFICATION DATE 06/10/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/772,903

**Applicant(s)**

JOERN ET AL.

**Examiner**

JOHN COONEY

**Art Unit**

1765

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 9, 11, 18, 19, 22-24, 26, 28, 30, 31 and 35-42 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 1-4, 9, 11, 18, 19, 22-24, 26, 28, 30, 31 and 35-42 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date \_\_\_\_\_

- 5) ☐ Notice of Informal Patent Application

- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9, 11, 18, 19, 22-24, 26, 28, 30, 31, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodnar et al.(5,143,945).

Bodnar et al. discloses preparations of polyisocyanurate based foams prepared by reacting isocyanates and isocyanate reactive materials, including polyester polyols in elevated amounts as claimed, at isocyanate indexes as claimed in the presence of blowing agents reading on those claimed, alkali metal salt trimerization catalysts in amounts as claimed, and functionalized and non-functionalized carboxylic acids, wherein the disclosed preparations read on the methods and products of applicants' claims (see examples, as well as, the entire document).

The pKa in water values are values associated with the selection of carboxylic acid and are held to be intrinsic features of the teachings of Bodnar et al.

Bodnar et al. differs from applicants' claims as to the specific amounts and selection of catalysts for the function of trimerization and urethanization. However, Bodnar et al. discloses selection of catalysts in overlap with those of applicants' claims and disclosure for the purpose of imparting their catalyzing effect, including the role of

trimerization and urethanization catalysis and the dual role of both (see column 8 line 32-column 9 line 45). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed catalysts within the teachings of Bodnar et al. for the purpose of controlling trimerization and urethanization effects during product formation in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. Further, though selection of amounts are not exact between Bodnar et al. and applicants' claims, it has long been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Reese* 129 USPQ 402 . Further, a prima facie case of obviousness has been held to exist where the proportions of a reference are close enough to those of the claims to lead to an expectation of similar properties. *Titanium Metals v Banner* 227 USPQ 773. **(see also MPEP 2144.05 I)** Similarly, it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Bodnar et al. differs from claim 31 in that water is not particularly required. However, Bodnar et al. is clear as to employment of water being a preferred embodiment of their invention for the purposes of imparting the foaming effect. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed water as the blowing agent of Bodnar et al. for the purpose of imparting the

foaming effect in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodnar et al. as applied to claims 1-4, 9, 11, 18, 19, 22-24, 26, 28, 30, 31, 35 and 36 above, and further in view of Scherbel et al.(5,688,835).

Applicants' claims 37-42 differ from Bodnar et al. in that hydrocarbons are not particularly employed. However, Scherbel et al. discloses hydrocarbons to be replacement blowing agents for halofluorocarbons in rigid foam applications (see column 1 lines 40-65). Accordingly, it would have been obvious for one having ordinary skill in the art to have replaced the halocarbons of Bodnar et al. with the hydrocarbons of Scherbel et al. for the purpose of imparting the foaming effect with environmentally advantageous results in order to arrive at the products and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. In addition to Scherbel et al.'s disclosure of specific selections of hydrocarbons falling within the group of compounds identified by applicants' claims, it is held that the selection of C4-C8 hydrocarbons are of the most readily envisioned selections of hydrocarbons from Scherbel et al.'s generic disclosure, and distinction based on this further aspect of applicants' claims.

Applicants' arguments have been considered. However, rejection is maintained.

The following previous arguments are maintained to be still applicable to the above rejections over Bodnar et al., alone, or in view of Scherbel et al.:

As to applicants' arguments directed towards the deficiencies of the combined teaching, it is held that the claims as the currently stand would be properly arrived at from the teachings and fair suggestions of the cited prior art. One more concerned with environmental concerns rather than price, insulation, and compatibility would look to the substitution of alkanes of Scherbel et al. for the haloalkanes of Bodnar et al. with the expectation of success in the absence of a showing of new or unexpected results attributed to differences in applicants' claims that are commensurate in scope with the claims as they currently stand. At this time, no sufficient showing of new or unexpected results has been made.

As to latest arguments regarding rejection over Bodnar taken alone, it is held and maintained that applicants' claims do not exclude the inclusion of halocarbons.

Additionally, as to applicants' latest arguments regarding rejection over Bodnar et al. in view of Scherbel et al., it is held that, though Bodnar et al. recognizes advantages to employment of halocarbons and inferior results in regards to their desired outcomes when some or all of their preferred halocarbons are not employed, satisfactorily/acceptably formed products would still have been expected to arise from the modifications laid out in examiner's rejection.

As to applicants' arguments of mere speculation, it is not seen or agreed that the expectation of acceptable foaming and/or beneficial environmental effects from the substitution or replacement of some or all of the halocarbons of Bodnar et al. with the hydrocarbons of Scherbel et al. is merely speculation from the standpoint of a patentability analysis. Hydrocarbons have known and proven blowing effects in urethane foam synthesis, as well as, known and proven advantages from the standpoint

of environmental concerns. To expect these benefits to carry through to the systems of the instant concern is not speculation but, rather, appropriate motivation to combine the teachings of the prior art. Accordingly, rejection is maintained to be appropriately maintained.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Cooney/  
Primary Examiner, Art Unit 1765